

Title (en)

LED display packaging with substrate removal and method of fabrication

Title (de)

Packung einer Leuchtdiodenanzeige mit Substratentfernung und Herstellungsverfahren

Title (fr)

Emballage d'un dispositif d'affichage avec enlèvement de substrat et méthode de fabrication

Publication

**EP 0785580 A2 19970723 (EN)**

Application

**EP 97100788 A 19970120**

Priority

US 58847096 A 19960118

Abstract (en)

A LED display package (60) and method of fabricating including a LED array display chip (10) having connection pads (16) positioned about the perimeter of the LED chip (10), a separate driver chip (20) having connection pads (28) routed to an uppermost surface, positioned to cooperatively engage those of the LED chip (10) when properly registered and interconnected using wafer level processing technology. The LED chip (10) being flip chip mounted to the driver chip (20) and having a layer of interchip bonding dielectric (52) positioned between the space defined by the LED chip (10) and the driver chip (20). The display package (60) subsequently having removed the substrate (12) onto which the LED array (14) was initially formed, thereby exposing the connection pads (16) of the LED chip (10) and a remaining indium-gallium-aluminum-phosphide (InGaAlP) epilayer (54). The light emitted from the LED chip (10), being emitted through the remaining indium-gallium-aluminum-phosphide (InGaAlP) epilayer (54) of the LED chip (10). <IMAGE>

IPC 1-7

**H01L 27/15**

IPC 8 full level

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CPC (source: EP KR US)

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Citation (applicant)

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